

## REMARKS

The above amendments and these remarks are responsive to the Office action dated April 11, 2006. Prior to the entry of these amendments, claims 1-4, 6-11, 13 and 14 are pending in the application. In the Office action claims 1, 4, 6 and 7 are rejected under 35 U.S.C. 103(a) based on Lindstedt (U.S. Pat. No. 5,109,668), claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) based on Maeda et al. (U.S. Pat. No. 6,122,911), claims 3 and 6-7 are rejected under 35 U.S.C. 103(a) based on Maeda et al. in view of Mashiko et al. (U.S. Pat. No. 6,454,622), and claims 8-11, 13 and 14 were indicated as allowable. Applicant thanks the Examiner for the careful consideration of the application and for the indications of allowability. Applicant traverses the rejections, but nevertheless amends the claims as shown above. In view of the amendments above, and the remarks below, applicant respectfully requests reconsideration of the application under 37 C.F.R. § 1.111 and allowance of the pending claims.

### Claims 1 and 4

Claim 1 has been amended to include features recited in original claim 2. Additionally, claim 1 has been amended to include, among other limitations, “the first exhaust sub-collecting pipe includes the first exhaust pipe group and the first joint portion and is formed in one unitary, integrally cast piece, and the second exhaust sub-collecting pipe includes the second exhaust pipe group and the second joint portion and is formed in one unitary, integrally cast piece, each of the unitary, integrally cast pieces being separable from the other.”

Applicant could find no disclosure in Lindstedt of a first and second exhaust pipe group where each group is cast integrally and separable from each other. Rather, Lindstedt discloses an

exhaust pipe collecting structure (exhaust manifold and elbow assembly) that is cast as a unitary piece. Specifically, Lindstedt states as follows.

**Manifold portion 14, elbow portion 24, water jacket portion 38, exhaust divider runner walls 40, 42, 44, 70, 72, 74, 76, 78, 80, steam exhaust channel bead 124, and water inlet opening fittings 108, 110, 112, 114 are all integrally lost foam cast as a one piece unitary assembly.**

*(Col. 5, lines 45-50)*

In contrast to Lindstedt, Applicant claims an exhaust pipe collecting structure with two separable sub-collecting pipe groups. Since Applicant's exhaust pipe collecting structure is comprised of separable pieces, Applicant provides the potential benefit of less burdensome installation and removal of the exhaust pipe collecting structure especially in a narrow space such as the engine compartment of a personal watercraft.

Furthermore, none of the other cited references discloses a first and second exhaust pipe group where each group is cast integrally and separable from each other. In particular, Maeda discloses an exhaust pipe collecting structure (exhaust manifold) where multiple exhaust conduits are welded to an outlet flange (See col. 4 lines 19-25). It appears that the structure of Maeda does not permit the exhaust structure components to be separable, due to the fact that the components are welded together. Thus, Maeda does not disclose each and every element of the invention of amended claim 1.

Applicant has further amended claim 1 to recite, among other limitations, "the opening of the first joint portion is opened toward the second joint portion and the opening of the second joint portion is opened toward the first joint portion, the first joint portion and the second joint portion are separably joined to each other at the joint faces thereof by the fastener device to form

the one exhaust passage including the first semi-cylindrical peripheral wall and the second semi-cylindrical peripheral wall.”

Applicant could find no disclosure in Lindstedt of this feature. In fact, Lindstedt teaches away from such a construction. Specifically, as discussed above, the entire exhaust manifold and elbow portion of Lindstedt is cast as a unitary piece, which would not utilize a fastener device to keep the exhaust pipe groups from separating. Moreover, Maeda also fails to disclose this claimed feature. Rather, Maeda discloses welding exhaust conduits to an outlet flange, thus creating a unitary structure that would not utilize a fastener device to keep the exhaust conduits from separating.

Furthermore, the Office action indicates that claim 1 describes a product by process. Applicant respectfully disagrees, but nonetheless amends the claims to remove “cast integrally” in several locations and to recite additional claim features, which clarify that the structural elements in question are “formed in one unitary, integrally cast piece.”

In view of the above, Applicant respectfully submits that claim 1 and dependent claim 3 are allowable, and requests that the rejections of these claim 1 based on Lindstedt and Maeda be withdrawn.

#### Claims 4 and 7

Claim 4 has been amended consistent with claim 1 to recite that “the first exhaust sub-collecting pipe includes the first exhaust pipe group and the first joint portion, and is formed in one unitary, integrally cast piece, and the second exhaust sub-collecting pipe includes the second exhaust pipe group and the second joint portion, and is formed in one unitary, integrally cast piece, the unitary, integrally cast pieces being separable from each other.” As discussed above in

relation to claim 1, these features in combination with the remaining features recited in claim 4, are not disclosed or suggested by Lindstedt or Maeda et al., nor any of the other cited prior art.

Claim 4 has further been amended to recite, “the connecting tube being separable from the unitary, integrally cast piece of the first exhaust sub-collecting pipe and the unitary, integrally cast piece of the second exhaust sub-collecting pipe; wherein the connecting tube includes two parts having a joint surface at which the two parts are jointed to each other, the joint surface extending along a longitudinal direction of the connecting tube.” Such a construction has the potential advantage that first and second exhaust pipe sub-collecting pipes may be separable from each other, facilitating assembly and disassembly even in small working spaces, such as in an engine room of a watercraft. These features, in combination with the remaining features recited in claim 4, are not disclosed or suggested by any of the cited prior art.

In view of the above, Applicant respectfully submits that claims 4 and 7 are allowable, and requests the rejections of claims 4 and 7 based on Lindstedt and Maeda be withdrawn.

#### Claims 8-11, 13 and 14

These claims have previously been indicated as allowable.

Applicant believes that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, applicant respectfully requests that the Examiner issue a Notice of Allowability covering the pending claims. If the Examiner has any questions, or

if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.


**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on August 9, 2006.

  
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Respectfully submitted,

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